

REMARKS

Reconsideration of this application is respectfully requested in view of the foregoing amendments and the following remarks.

The Applicants appreciate the withdrawal of the requirement for restriction.

By the foregoing amendment, claims 1-6 have been canceled and claims 11, 16 and 18 have been amended. Claims 7-9 have been previously canceled. Thus, claims 10-18 are currently pending in the application and subject to examination.

In the Office Action mailed November 22, 2006, claims 1, 3-6 and 10-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over EP 0997900, or, or in the alternative under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,553,532 to Aoki (hereinafter, "Aoki"). Claim 2 was rejected under 35 USC § 103(a) as being unpatentable over EP 0997900 or Aoki in view of U.S. Patent No. 4,855,754 to Tanaka et al. (hereinafter, "Tanaka"). It is noted that claims 1-6 have been canceled, and claims 10, 16 and 18 have been amended. To the extent the rejections remain applicable to the claims currently pending, the Applicants hereby traverse the rejections, as follows.

In the Applicants invention as recited in claim 10, as amended, a power supply means supplies an electric power from a main power source or an auxiliary power source to a read device and a write device. A detector means detects an interruption of at least any one of a read operation of the read device and a write operation of the write device in the course of writing the program information by the write device, the interruption being caused due to an electric power failure of the main power source. A determination means, which operates when the detector means has detected the interruption, supplies an electric power from the auxiliary power source, determines a

write status of program information on the second information storage medium at the time of the interruption, and stores the write status sent from the detector means in a nonvolatile memory. A control means controls the read device and the write device upon restarting writing the program information by the write device and in response to the write status read from the nonvolatile memory when the electric power supply from the main power source is restored, to continue a write operation on the second information storage medium from the program information to be read subsequent to the program information at the time of the interruption or to perform a rewrite operation on the second information storage medium from the program information at the time of the interruption.

Similarly, in claims 16 and 18, as amended, an electric power is supplied from a main power source to a read device and a write device; an interruption of any one of the read operation and the write operation is detected, the interruption being caused due to an electric power failure of the main power source; an electric power is supplied from an auxiliary power source when the interruption has been detected. In addition, in claims 16 and 18 as amended, a write status of program information on the second information storage medium is determined at the time of the interruption when the interruption has been detected, and the write status is stored in a nonvolatile memory. Upon restarting the write operation and in response to the write status read from the nonvolatile memory when the electric power supply from the main power source is restored, the write operation on the second information storage medium is continuously performed from program information to be read subsequent to the program information

at the time of the interruption, or a rewrite operation on the second information storage medium is performed from the program information at the time of the interruption.

Thus, in claims 10, 16 and 18, as amended, when an interruption in a read operation and/or a write operation in a process of writing program information occurs due to an electric power failure, a determination means supplies electric power from an auxiliary power source and stores the write status sent from the detector means in a nonvolatile memory, and a control means operates to have the write status read from the nonvolatile memory when restarting the writing of program information. The invention of claims 10, 16 and 18, as amended, provides an improved information read/write apparatus, an improved information read/write method, and an improved program storage medium storing a read and write procedure program which allows a computer to perform read/write processing that requires only a simple operation to continue high-quality reading and writing of the program information subsequent to the most recently written program information at an interruption caused by a power failure or the like. The invention of claims 10, 16 and 18 makes it possible to continue a read/write operation of program information subsequent to an interruption without requiring cumbersome manual operations (for confirming write status of data). This, in turn, serves to improve operability and provide high-quality read and write operations, thereby ensuring continuity between the program information stored prior to the interruption and the program information stored subsequent to the interruption.

Aoki judges whether data has been normally recorded in a specific ECC block. The judgment of Aoki is performed only after a power supply is turned-on, subsequent to a power interruption.

As explained above, in the claimed invention, when a power supply interruption is eliminated and recording of program information is to be continued, it is possible to continue the information recording so as to ensure continuity between the program information stored prior to the interruption and the program information stored subsequent to the interruption, without requiring cumbersome manual operations (for confirming write status of data). In this way, since a write status is determined (judged) at the time of power supply interruption, it is possible to quickly restart recording or reproducing in accordance with the write status at the time of a power supply interruption. Aoki does not disclose or suggest determining (or judging) a write status at the time of a power supply interruption, as in the claimed invention. If, as in Aoki, a confirmation of whether data has been normally recorded in an ECC block is performed only after a power supply is turned on, since neither recording nor reproducing can be performed until the confirmation is completed, it is impossible to quickly continue the recording or reproducing of the program information even when the power supply has been restored. The device of Aoki does not provide the advantages attainable by the claimed invention.

Specifically, Aoki fails to disclose or suggest at least the features of power supply means for supplying an electric power from a main power source or an auxiliary power source to the read device and the write device; detector means for detecting an interruption of at least any one of a read operation of said read device and a write operation of said write device in the course of writing said program information by said write device, said interruption being caused due to an electric power failure of the main power source; determination means which operates when said detector means has

detected the interruption, to supply an electric power from the auxiliary power source, to determine a write status of program information on said second information storage medium at the time of said interruption, and to store the write status sent from the detector means in a nonvolatile memory; control means for controlling said read device and said write device, upon restarting writing said program information by said write device and in response to the write status read from the nonvolatile memory when the electric power supply from the main power source is restored, to continue a write operation on said second information storage medium from the program information to be read subsequent to the program information at the time of said interruption or to perform a rewrite operation on said second information storage medium from said program information at the time of said interruption, as recited in claim 10, as amended.

For at least this reason, the Applicants submit that claim 10 is allowable over the applied art of record. As claim 10 is allowable, the Applicants submit that claims 11-15, which depend from allowable claim 10, are likewise allowable for at least the reasons set forth above with respect to claim 10.

Similarly, Aoki fails to disclose or suggest at least the features of detecting an interruption of any one of said read operation and said write operation in the course of writing said program information onto said second information storage medium, said interruption being caused due to an electric power failure of the main power source; supplying an electric power from an auxiliary power source when said interruption has been detected; determining a write status of program information on said second information storage medium at the time of said interruption when said interruption has been detected and storing the write status in a nonvolatile memory;

and upon restarting writing said program information and in response to the write status read from the nonvolatile memory when the electric power supply from the main power source is restored, continuously performing a write operation on said second information storage medium from program information to be read subsequent to the program information at the time of said interruption or performing a rewrite operation on said second information storage medium from said program information at the time of said interruption, as recited in claims 16 and 18, as amended.

For at least this reason, the Applicants submit that claims 16 and 18 are allowable over the applied art of record. As claim 16 is allowable, the Applicants submit that claim 17, which depends from allowable claim 16, is likewise allowable for at least the reasons set forth above with respect to claim 16.

Conclusion

For all of the above reasons, it is respectfully submitted that the claims currently pending are in condition for allowance and a Notice of Allowability is earnestly solicited.


Should the Examiner determine that any further action is necessary to place this application into better form, the Examiner is invited to contact the undersigned representative at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants hereby petition for an appropriate extension of time. The Commissioner is hereby authorized to charge any fee deficiency or credit any overpayment associated with this

communication to Deposit Account No. 01-2300 referencing client matter number
107156-00095.

Respectfully submitted,

Arent Fox, PLLC



Michele L. Connell
Registration No. 52,763
27931

Customer No. 004372
1050 Connecticut Ave., N.W.
Suite 400
Washington, D.C. 20036-5339
Telephone No. (202) 857-6104
Facsimile No. (202) 857-6395

CMMMLC: